

# High-Fidelity, Small-Footprint Loudspeaker

### Model HFSF1



### **Description**

The Bogen HFSF1 High-Fidelity, Small-Footprint Ceiling Loudspeaker delivers superior sound in a very compact enclosure. The speaker measures 7-1/4" diameter and mounts easily in all types of ceilings – including existing hard-surfaced types and suspended type.

Several levels of power output can be controlled directly from the front baffle via a rotary tap selector switch under the grille. The low-distortion, coaxial-design speaker, coupled with a computer-matched venting system, delivers superb fidelity for music as well as high intelligibility for voice reinforcement. Coupled with the Bogen CSUB Ceiling Subwoofer, it provides the perfect solution for environments that require the highest-quality sound with minimal visual impact.

#### **Features**

- · Superior sound in a very compact enclosure
- Wide-dispersion coaxial driver for broad, even coverage; superb off-axis response
- · Small footprint, only 7-1/4" diameter speaker face
- Installs in wide range of ceiling types
- · For 70V and low-impedance systems
- Selectable power taps via front-mounted control (under grille); 16, 8, 4, 2, 1 watts at 70V
- 16-ohm Input setting for low-impedance systems (selectable via front-mounted control, under grille)
- · Quick wiring with removable plug-in connector
- Plug-in connector provides loop-through terminals for next speaker
- Terminal cover provides knockout for flexible conduit connection

- Compounded rubber surround for lasting performance year after year
- Ceiling insert of hole of 6-1/4" diameter required for speaker
- Integral mounting clamps tighten quickly and firmly
- · Attachment point for seismic safety cable
- Off-white textured finish easily painted to match room decor
- Available accessories: Tile Bridge Support (TBSF), Safety Cable (CK10), both sold separately

## Technical Specifications

Frequency Response\*: 78 Hz to 20 kHz

**LF Driver:** 4" Polypropylene cone with rubber surround

**HF Driver:** 3/4" Polycarbonate dome

Sensitivity (1W/1m): 86 dBspl

**Dispersion:** 150 degrees

Impedance Ratings: Low (16 ohms), High (70V)

Power Input (Max.): 50W at 16 ohms, 16W at 70V

Power Settings<sup>†</sup>: 70V: 16, 8, 4, 2, 1 Watts

Baffle/Bezel Material: Fire-rated (94V0) ABS

Back Enclosure: Heavy-gauge steel

Grille Material: Powder-coated, perforated metal

**Color:** Off-white, paintable

**Terminations** 4-Terminal Snap-lock input connector

Product Weight: 4.5 lb.

**Dimensions:** 7-1/4" Dia. × 7-1/2" D

Ceiling Cutout: 6-1/4" Dia.

Accessories Included: Snap-lock input connector (1)

Steel terminal cover (1), with (2) mounting screws

Optional Accessories: Suspension/Safety Cable (CK10)

Tile Bridge Support (TBSF)

### Architect & Engineer Specifications

The loudspeaker shall be a Bogen Model HFSF1 High-Fidelity, Small-Footprint ceiling speaker or approved equivalent, consisting of one 4" (nominal) low-frequency transducer; one 3/4" (nominal) high-frequency transducer; and a filter network for dividing frequencies between the transducers. Frequency response shall be 78 Hz to 20 kHz. Sensitivity, measured 1 watt at 1 meter, shall be 86 dBspl. Max. power input shall be 50W at 16 ohms, or 16W at 70V.

The front baffle shall be injection-molded ABS material and the enclosure (back can) shall be steel. All components shall be mounted inside the enclosure.

The baffle bezel and perforated steel speaker grille are off-white. The baffle bezel has a mild texture finish to promote paint adhesion, if desired

The low-frequency driver shall utilize a molded polypropylene diaphragm (cone). A compounded rubber surround shall be formulated to withstand environmental conditions with high or low heat, high or low humidity, and ultra-violet light.

The high-frequency driver shall utilize a diaphragm consisting of black polycarbonate.

Integral swing-out clamps shall provide a secure installation in the ceiling surface. A safety cable attachment point shall be included on the side of the steel enclosure. An optional 10-foot long cable kit shall be available to serve as a backup safety cable (Model CK10). An optional tile bridge support installation bracket shall provide additional support when mounting the loud-speaker in suspended ceilings (Model TBSF).

The input connector shall be a 4-screw pluggable input connector, providing loop-through terminals for additional speakers.

The power input selection shall be via a front-mounted rotary switch, located under the removable grille. High-impedance tap selections (70V) shall be 16, 8, 4, 2, and 1 watts. A low-impedance 16-ohm input shall also be available via the rotary switch.

The speaker shall require a minimum vertical clearance of 7-1/8" from the front surface of the ceiling. Overall dimensions of the speaker shall not exceed 7-1/4" Diameter  $\times$  7-1/2" Deep. Product weight shall be 4.5 lb.



<sup>\* 1/2-</sup>Space response (ceiling-mounted), 16-ohm input

<sup>†</sup> Front panel, switch-selected